# http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s US 20060070863/pn

L1 0 US 20060070863/PN (US20060070863/PN)

=> s US 20080070863/pn

L2 1 US 20080070863/PN (US20080070863/PN)

=> d 12 ibib abs ti all

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:470211 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 143:2640

TITLE: Synergistic insecticidal combinations

comprising

anthranilic acid amides and pyrethroids.

INVENTOR(S): Funke, Christian; Fischer, Reiner; Fischer,

Ruediger;

Hungenberg, Heike; Andersch, Wolfram;

Thielert,

Wolfgang; Kraus, Anton

PATENT ASSIGNEE(S): Bayer Cropscience Aktiengesellschaft, Germany

SOURCE: F

PCT Int. Appl., 64 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT I	. 00			KIND DATE APPLICATION NO.						DATE				
2004	- WO 41030	2005	0487	13		A1		2005	0602	1	WO 2	004-	EP12	330		
			AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,
CA,	CH,		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,
GB,	GD,		GE.	GH.	GM.	HR.	HU.	ID,	T I	TN.	TS.	JP.	KE.	KG.	KP.	KR.
KΖ,	LC,					·	,	·		·				·	·	·
NA,	NI,		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
SL,	SI,		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,
ZM,	ZW	DIM.	RM	СH	СМ	KE	T.S	MW,	M7.	NΔ	S D	ST.	S.7.	Т7.	IIC	7.M
ZW,	AM,	I/M •	DW,	GII,	Gr1,	INE,	пυ,	1.104	114,	IVA,	SD,	υц,	54,	14,	00,	Z1:1 <b>,</b>
DE,	DK.		AZ,	BY,	KG,	KΖ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,
22,	211,		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,
RO,	SE,															

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MR,	NE,	SN	ן די	<b>)</b> .	TG											
	DE 10	20040		•		A1		2005	0707		DE 2	2004-	1020	04023	1564	
200	40503															
	AU 20	04290	502			A1		2005	0602	-	AU 2	2004-	2905	02		
200	41030															
	EP 16	86859				A1		2006	0809		EP 2	2004-	7910	83		
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	41030	~= / ~ :						4.0	0640							
OTH	ER SOUR	CE(S)	:			MARI	PAT	143:	2640							

GI

AB Synergistic insecticidal combinations comprise anthranilic acid amides I [A1, A2 = O or S; X1 = N or (un)substituted NH; R1 = H, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl; R2 = H, alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, etc.; R3 = H, (un)substituted alkyl, alkenyl, etc.; R2NR3 = ring; R4 = H,

(halo)alkyl, (halo)alkenyl, (halo)alkynyl, (halo)cycloalkyl, (un)substituted Ph, benzyl, PhO, etc; R5, R8 = H, halo, (un)substituted (halo)alkyl, etc.; R7 = H, halo (halo)alkyl, (halo)alkoxy, etc.; R9 = haloalkyl, haloalkoxy, haloalkylsulfinyl or halo] and pyrethroids.

TI Synergistic insecticidal combinations comprising anthranilic acid amides

and pyrethroids.

- AN 2005:470211 CAPLUS Full-text
- DN 143:2640
- ED Entered STN: 02 Jun 2005
- TI Synergistic insecticidal combinations comprising anthranilic acid amides

and pyrethroids.

IN Funke, Christian; Fischer, Reiner; Fischer, Ruediger; Hungenberg, Heike;

Andersch, Wolfram; Thielert, Wolfgang; Kraus, Anton

- PA Bayer Cropscience Aktiengesellschaft, Germany
- SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

- DT Patent
- LA German
- IC ICM A01N043-56

ICS A01N055-10; A01N053-14; A01N053-10; A01N053-08; A01N053-06; A01N053-04; A01N053-00; A01N047-02; A01N037-34; A01N031-14

CC 5-4 (Agrochemical Bioregulators)

FAN.CNT 1

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 PI WO 2005048 20041030	713	A1	20050602	WO 2004-EP12330	
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GB, GD,	. GH. GM	. HR. HU	. TD. TI	IN, IS, JP, KE, KG, KP,	KR.
KZ, LC,		, ,	, , ,		ŕ
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EP 1686859
                 A1 20060809 EP 2004-791083
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                              20061220 CN 2004-80033692
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                                         IN 2006-DN2516
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    KR 2006126498 A
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    US 20080070863 A1 20080320 US 2007-579076
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    WO 2004-EP12330
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http://www.cas.org/support/stngen/stndoc/properties.html
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L3
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SET COMMAND COMPLETED
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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) / N:y
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
L3
RN
    852369-60-9 REGISTRY
    Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,
CN
     (S)-cyano(3-phenoxyphenyl) methyl ester, (1R, 3R)-, mixt. with
    N-[4-chloro-2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1-
(3-chloro-
     2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI)
(CA
    INDEX NAME)
FS
    STEREOSEARCH
    C22 H19 Br2 N O3 . C21 H18 C12 F3 N5 O2
MF
CI
    MXS
SR
    STN Files:
                CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)
```

CM 1

CRN 500008-00-4

CMF C21 H18 C12 F3 N5 O2

CM 2

CRN 52918-63-5

CMF C22 H19 Br2 N O3

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

# http://www.cas.org/support/stngen/stndoc/properties.html

=> S 852369-62-1/RN

L4 1 852369-62-1/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND SET COMMAND COMPLETED

=> D L4 SQIDE 1-

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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 852369-62-1 REGISTRY

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-

propenyl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)rel-, mixt. with N-[4-chloro-2-methyl-6-[[(1methylethyl)amino]carbonyl]phenyl]-1-(3chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI) (CA INDEX NAME) FS STEREOSEARCH C23 H19 Cl F3 N O3 . C21 H18 Cl2 F3 N5 O2 CI MXS SR CA STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent RL.P Roles from patents: BIOL (Biological study); USES (Uses) CM 1 CRN 500008-00-4 CMF C21 H18 C12 F3 N5 O2

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CM 2

CRN 91465-08-6

CMF C23 H19 C1 F3 N O3

Relative stereochemistry. Double bond geometry as shown.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 852369-63-2/RN

=> SET NOTICE 1 DISPLAY

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=> D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):Y THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 852369-63-2 REGISTRY

 ${\tt CN Cyclopropanecarboxylic\ acid,\ 3-(2,2-dichloroethenyl)-2,2-dimethyl-2} \\$ 

cyano(4-fluoro-3-phenoxyphenyl)methyl ester, mixt. with N-[4-chloro-2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1-(3-chloro-

2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI)

(CA

INDEX NAME)

MF C22 H18 C12 F N O3 . C21 H18 C12 F3 N5 O2

CI MXS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)

CM 1

CRN 500008-00-4 CMF C21 H18 C12 F3 N5 O2

CM 2

CRN 68359-37-5

CMF C22 H18 C12 F N O3

$$C1_2C = CH$$

$$C = CH$$

### => D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):Y THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 852369-63-2 REGISTRY

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-

cyano(4-fluoro-3-phenoxyphenyl)methyl ester, mixt. with
N-[4-chloro-2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1(3-chloro-

2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI)

(CA

INDEX NAME)

MF C22 H18 C12 F N O3 . C21 H18 C12 F3 N5 O2

CI MXS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)

CM 1

CRN 500008-00-4

CMF C21 H18 C12 F3 N5 O2

CM 2

CRN 68359-37-5

CMF C22 H18 C12 F N O3

$$C1_2C = CH \qquad C-O-CH \qquad OPh \\ C \downarrow C \downarrow CH \qquad C \downarrow CH$$

NRDC 104

Penick 1382

CN

CN

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

# http://www.cas.org/support/stngen/stndoc/properties.html

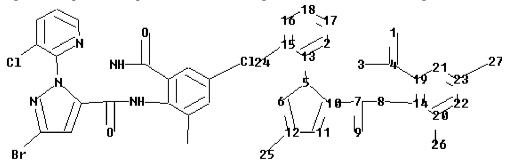
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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y
L6
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN
     10453-86-8 REGISTRY
CN
     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-
y1)-,
     [5-(phenylmethyl)-3-furanyl]methyl ester (CA INDEX NAME)
OTHER CA INDEX NAMES:
     3-Furanmethanol, 5-benzyl-, 2,2-dimethyl-3-(2-
     methylpropenyl)cyclopropanecarboxylate (8CI)
CN
     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-
     [5-(phenylmethyl)-3-furanyl]methyl ester (9CI)
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     (5-benzyl-3-furyl) methyl ester (8CI)
OTHER NAMES:
     (5-Benzyl-3-furyl)methyl 2,2-dimethyl-3-(2-
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     (5-Benzyl-3-furyl) methyl chrysanthemate
CN
     (5-Benzyl-3-furyl)methyl-DL-cis, trans-chrysanthemate
CN
     5-Benzyl-3-furylmethyl (±)-cis-trans-chrysanthemate
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LC
BIOTECHNO, CA,
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CSNB,
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MSDS-OHS,
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       USPATFULL, USPATOLD
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     Other Sources: DSL**, EINECS**
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DT.CA CAplus document type: Conference; Dissertation; Journal;
Patent; Report
      Roles from patents: ANST (Analytical study); BIOL (Biological
RL.P
study);
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(Reactant or
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RLD.P Roles for non-specific derivatives from patents: BIOL
(Biological
       study); PREP (Preparation); PROC (Process); RACT (Reactant or
reagent);
       USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL
(Biological
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(Preparation); PROC
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(Uses);
       NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL
(Biological
       study); OCCU (Occurrence)
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# http://www.cas.org/support/stngen/stndoc/properties.html

=>

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chain nodes :

1 3 4 7 8 9 24 25 26 27

ring nodes :

2 5 6 10 11 12 13 14 15 16 17 18 19 20 21 22 23

chain bonds :

1-4 3-4 4-19 5-13 7-10 7-8 7-9 8-14 12-25 15-24 20-26 23-27 ring bonds :

exact/norm bonds :

1-4 3-4 5-10 5-6 5-13 6-12 7-8 7-9 8-14 10-11 11-12

exact bonds :

4-19 7-10 12-25 15-24 20-26 23-27

normalized bonds :

### Match level :

1:CLASS 2:Atom 3:CLASS 4:CLASS 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS

=> d 17 L7 HAS NO ANSWERS L7 STR

# http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 18 305 L8 L9 => s 19 and pesticides/ct 51008 PESTICIDES/CT L10 27 L9 AND PESTICIDES/CT => s 110 and (py<2003 or ay<2003 or pry,2003) 22983868 PY<2003 4505976 AY<2003 223 PRY 28 PRIES 250 PRY (PRY OR PRIES) 43663 2003 0 PRY,2003 (PRY(W)2003) L11 1 L10 AND (PY<2003 OR AY<2003 OR PRY,2003) => s 110 and (py<2003 or ay<2003 or pry<2003) 22983868 PY<2003 4505976 AY<2003 3975310 PRY<2003 L12 1 L10 AND (PY<2003 OR AY<2003 OR PRY<2003) => d 112 ibib abs ti L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154408 CAPLUS Full-text DOCUMENT NUMBER: 138:205054 TITLE: Preparation of substituted anthranilamides for controlling invertebrate pests

INVENTOR(S): Finkelstein, Bruce Lawrence; Lahm, George
Philip;

McCann, Stephen Frederick; Song, Ying;

Stevenson,

Thomas Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE:

PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		ENT				KIN:	D –	DATE		APPLICATION NO.					DATE	
		2003	0162	84		A1		2003	0227		WO 2	002-	US26	960		
2002	20813	} <	70 177	7. (	7) T	70.10.47	ייי ע	7) [ ]	7) 17	D 7	DD	D.C	DD	DV	DØ	C 7
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OTHER SOURCE(S): MARPAT 138:205054

GΙ

The title compds. [I; A, B = O, S; X = N, CR10; Y = N, CH; R1 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl, cycloalkyl, etc.; R3 = H, alkyl, alkenyl, etc.; NR2R3 = (un)substituted ring optionally containing addnl. heteroatom; R4 = alkyl, haloalkyl, CN, etc.; R5, R8 = H, alkyl, haloalkyl, etc.; R7 = H, alkyl, haloalkyl, etc.; R9 = CF3, OCF3, OCHF2, etc.; R10 = H, alkyl, haloalkyl, etc.], useful for controlling an invertebrate pest, were prepared E.g., a 3-step synthesis of I [A, B = O; X = CH; Y = N; R1 = H; R2 = iso-Pr; R3 = H; R4 = Me; R5 = H; R7 = 2-(CH2OH); R8 = H; R9 = CF3], starting from 1-[2-(methoxycarbonyl)phenyl]-3-trifluoromethyl-1H-pyrazole-5-carboxylic acid and 2-amino-3-methylbenzoic acid, which provided excellent levels of plant protection (20% or less damage) in biol. tests, was given.

TI Preparation of substituted anthranilamides for controlling invertebrate

pests

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE

FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

## http://www.cas.org/support/stngen/stndoc/properties.html

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Ε7
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                  10453-95-9/RN
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Ε8
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=> d 113
L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
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RN
ΕD
     Entered STN: 16 Nov 1984
CN
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CN
     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-
     [5-(phenylmethyl)-3-furanyl]methyl ester (9CI)
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     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-,
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CN
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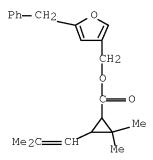
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PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, USPATOLD

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

812 REFERENCES IN FILE CA (1907 TO DATE)

73 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

819 REFERENCES IN FILE CAPLUS (1907 TO DATE

### http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

 $\Rightarrow$  s 112 and 113

819 L13

L15 0 L12 AND L13

=> d l12 ibib abs ti all

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154408 CAPLUS Full-text

DOCUMENT NUMBER: 138:205054

TITLE: Preparation of substituted anthranilamides for

controlling invertebrate pests

INVENTOR(S): Finkelstein, Bruce Lawrence; Lahm, George

Philip;

McCann, Stephen Frederick; Song, Ying;

Stevenson,

Thomas Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

PATENT NO.		KIND DATE				APPL	ICAT	ION	NO.		DATE	
WO 2003016284		A1		2003	0227	,	WO 2	002-	US26	960		
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GE, GH,												
GM, HI	R, HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
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OM, PH, PL, P'	Γ. RO.	RII.	SD.	SE.	SG.	ST.	SK.	SL	т.т.	TM.	TN.	TR.
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US 2004-486312 A3

20040722

OTHER SOURCE(S):

MARPAT 138:205054

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GΙ

The title compds. [I; A, B = O, S; X = N, CR10; Y = N, CH; R1 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl, cycloalkyl, etc.; R3 = H, alkyl, alkenyl, etc.; NR2R3 = (un)substituted ring optionally containing addnl. heteroatom; R4 = alkyl, haloalkyl, CN, etc.; R5, R8 = H, alkyl, haloalkyl, etc.; R7 = H, alkyl, haloalkyl, etc.; R9 = CF3, OCF3, OCHF2, etc.; R10 = H, alkyl, haloalkyl, etc.], useful for controlling an invertebrate pest, were prepared E.g., a 3-step synthesis of I [A, B = O; X = CH; Y = N; R1 = H; R2 = iso-Pr; R3 = H; R4 = Me; R5 = H; R7 = 2-(CH2OH); R8 = H; R9 = CF3], starting from 1-[2-(methoxycarbonyl)phenyl]-3-trifluoromethyl-1H-pyrazole-5-carboxylic acid and 2-amino-3-methylbenzoic acid, which provided excellent levels of plant protection (20% or less damage) in biol. tests, was given.

TI Preparation of substituted anthranilamides for controlling invertebrate

pests

AN 2003:154408 CAPLUS Full-text

DN 138:205054

ED Entered STN: 28 Feb 2003

TI Preparation of substituted anthranilamides for controlling invertebrate

pests

IN Finkelstein, Bruce Lawrence; Lahm, George Philip; McCann, Stephen Frederick; Song, Ying; Stevenson, Thomas Martin

PA E. I. Du Pont de Nemours & Co., USA

SO PCT Int. Appl., 105 pp. CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D231-14

ICS C07D401-04; A01N043-56

CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 5

FAN.CNT 1

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<sup>=&</sup>gt; S 500028-88-6/RN

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L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 500028-88-6 REGISTRY

CN Carbamic acid, ethyl-, 2-[[2-[[[3-bromo-1-(3-chloro-2-pyridinyl)-

1H-

 $\verb|pyrazol-5-yl| carbonyl| amino] - 5-chloro-3-methylbenzoyl| amino] \verb|propylester| \\$ 

(9CI) (CA INDEX NAME)

MF C23 H23 Br C12 N6 O4

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES

(Uses)

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 500028-79-5/RN

L17 1 500028-79-5/RN

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L17 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

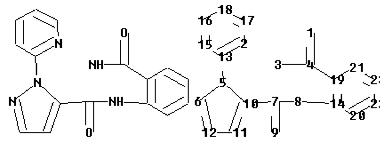
RN 500028-79-5 REGISTRY

CN 1H-Pyrazole-5-carboxamide, 3-bromo-N-[4-chloro-2-

# http://www.cas.org/support/stngen/stndoc/properties.html

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anthranilamide.str



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# Match level: 1:CLASS 2:Atom 3:CLASS 4:CLASS 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom

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L21 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
     101007-06-1 REGISTRY
     Entered STN: 22 Mar 1986
ED
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     (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
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     1-(trifluoromethyl)ethoxy]-1-propenyl]-, (S)-cyano(3-
phenoxyphenyl) methyl
     ester, (1R, 3S) - (9CI)
     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-[3-oxo-3-[2,2,2-
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(trifluoromethyl)ethoxy]-1-propenyl]-, cyano(3-phenoxyphenyl)methyl ester,

 $[1R-[1\alpha(S^*),3\alpha(Z)]]-$ 

OTHER NAMES:

CN ACR 50

CN ACR 50 (pesticide)

CN Acrinathrin

CN Ardent

CN HOE 076003

CN NU 702

CN Orytis

CN RU 38702

CN Rufast

FS STEREOSEARCH

MF C26 H21 F6 N O5

CI COM

SR CA

LC STN Files: AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CBNB.

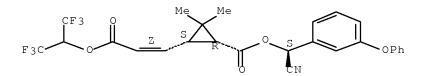
CHEMCATS, CHEMLIST, CSCHEM, MRCK\*, MSDS-OHS, PROMT, RTECS\*, TOXCENTER,

USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Absolute stereochemistry.

Double bond geometry as shown.



# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

330 REFERENCES IN FILE CA (1907 TO DATE)

63 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

335 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e alpha-cypermethrin/cn

E25 1 ALPHA-CYCLODEXTRINASE (GEOBACILLUS KAUSTOPHILUS

STRAIN HTA42

6)/CN

E26 1 ALPHA-CYCLOHEXYL-ALPHA-PHENYL-1-PIPERIDINEPROPANOL

HYDROCHLO

RIDE/CN

E27 0 --> ALPHA-CYPERMETHRIN/CN

E28 1 ALPHA-CYPERMETHRIN-FENAMIDONE MIXT./CN

E29 1 ALPHA-CYPERMETHRIN-PROPAMOCARB HYDROCHLORIDE

MIXT./CN

E30 1 ALPHA-D-1,4-GLUCOSIDASE (BDELLOVIBRIO BACTERIOVORUS

STRAIN H

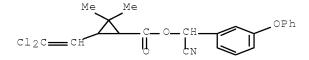
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D100 GENE MALA)/CN
E31
                 ALPHA-D-1, 4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
AUREUS STRAIN
                  MRSA252 GENE MALA)/CN
E32
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AUREUS STRAIN
                  MSSA476)/CN
                 ALPHA-D-1, 4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
STRAIN ET3-1
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E34
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STRAIN MU50 G
                 ENE MALA)/CN
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                 ALPHA-D-1, 4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
STRAIN RF122
                 GENE MALA)/CN
E36
                 ALPHA-D-1, 4-GLUCOSIDASE (STAPHYLOCOCCUS EPIDERMIDIS
           1
STRAIN A
                  TCC12228 GENE SE1191)/CN
=> e alpha cypermethrin/cn
           1 ALPHA CONOTOXIN QCAL-1 (CONUS QUERCINUS)/CN
                 ALPHA CONOTOXIN QCAL-2 (CONUS QUERCINUS)/CN
E38
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            0 --> ALPHA CYPERMETHRIN/CN
E39
E40
           1 ALPHA D3/CN
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E41
NEOFORMANS STR
                 AIN JEC21)/CN
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                 ALPHA E1 ESTERASE (HAEMATOBIA IRRITANS STRAIN CAMP
E42
COOLEY-4/
                 97 GENE AE1)/CN
            1 ALPHA E7 ESTERASE (HAEMATOBIA IRRITANS IRRITANS
E43
STRAIN CAMP
                 COOLEY 4/97 CLONE HF41CC GENE AE7)/CN
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COOLEY-4/
                 97 GENE AE8)/CN
                 ALPHA ENDOSULFINE (HUMAN)/CN
E45
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                ALPHA ENOLASE (HUMAN CLONE 23942)/CN
E46
E47
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                ALPHA ENOLASE LIKE 1 (HUMAN GENE ENO1L1)/CN
E48
                ALPHA ENOLASE/TAU-CRYSTALLIN (FICEDULA HYPOLEUCA
ISOLATE OS3
                 )/CN
=> e cypermethrin/cn
E49
       1 CYPERIN/CN
E50
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           1 --> CYPERMETHRIN/CN
E51
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                CYPERMETHRIN, D-TRANS-B/CN
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E55
                CYPERMETHRIN-ACEPHATE MIXT./CN
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           1 CYPERMETHRIN-AVERMECTIN MIXT./CN
1 CYPERMETHRIN-BACILLUS THURINGIENSIS MIXT./CN
E58
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E59
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                  CYPERMETHRIN-BENSULTAP MIXT./CN
=> s e51
L22
             1 CYPERMETHRIN/CN
=> d 122
L22 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    52315-07-8 REGISTRY
RN
ED
    Entered STN: 16 Nov 1984
CN
    Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
     cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
    \alpha-Cyano-m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
    dimethylcyclopropanecarboxylate
CN
    Agrometrin
CN
    Agrothrin
CN
    Almetrin
CN
    Ambush C
CN
    Ambush CY
CN
    Ammo
CN
    Ammo (pesticide)
CN
    Antiborer 3767
CN
    Ardap
CN
    Arrivo
CN
    Asymmethrin
CN
    Bandit
CN
    Barrage
    Barricade
CN
CN
    Barricade (insecticide)
CN
   Barricade 10EC
CN
    Basathrin
CN
    Battery (insecticide)
CN
    Beta-cypermethrin
CN
    CCN 52
CN
    Chinimix
    Chinmix
CN
CN
    Cilcord
CN
    cis-Cypermethrin
CN
    Colt
CN
    Creokhin
CN
    Cybil
CN
    Cymbush
CN
    Cymet
CN
    Cympa-Ti
CN
    Cymperator
CN
    Cyperco
CN
    Cyperil
CN
    Cyperkill
CN
    Cypermethrin
CN
    Cypor
CN
    Demon
CN
    Demon TC
CN
    Dimcyp
CN
    Drago
```

CN

Ecofleece Sheep Dip (Non-OP)

CN Ectomin CN Ectopor CN Excis EXP 5598 CN CN Fenom CN Fenom (pesticide) CN Flytick CN FMC 30980 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL DISPLAY 727730-89-4, 97955-44-7, 139203-31-9, 137497-61-1, 69865-47-0, DR 142443-95-6, 146909-55-9, 86752-99-0, 86753-92-6, 88161-75-5, 159940-28-0, 186554-45-0 MFC22 H19 C12 N O3 CI STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, LC BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, PIRA, PROMT, RTECS\*, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU (\*File contains numerically searchable property data) Other Sources: EINECS\*\* (\*\*Enter CHEMLIST File for up-to-date regulatory information)



### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5818 REFERENCES IN FILE CA (1907 TO DATE)
184 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5855 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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E70
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                 BETADET S 20/CN
E71
                 BETADET SC 2/CN
            1
E72
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                 BETADET SH-R/CN
=> e cyfluthrin/cn
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                 CYFLUMETOFEN-SPIROMESIFEN MIXT./CN
                 CYFLUMETOFEN-SPIROTETRAMAT MIXT./CN
E75
           1 --> CYFLUTHRIN/CN
E76
                 CYFLUTHRIN-ALLYL ISOTHIOCYANATE MIXT./CN
            1
E77
            1
                  CYFLUTHRIN-CHLORPYRIFOS-METHYL MIXT./CN
E78
           1
                 CYFLUTHRIN-ETHION MIXT./CN
E79
           1
                 CYFLUTHRIN-FENAMIDONE MIXT./CN
E80
           1
                CYFLUTHRIN-IMIDACLOPRID MIXT./CN
E81
           1
                CYFLUTHRIN-PENTHIOPYRAD MIXT./CN
                CYFLUTHRIN-PHOXIM MIXT./CN
E82
           1
           1
                 CYFLUTHRIN-PIPERONYL BUTOXIDE MIXT./CN
E83
E84
           1
                CYFLUTHRIN-PIPERONYL BUTOXIDE-CHLORPYRIFOS-METHYL
MIXT./CN
=> s e75
L23
            1 CYFLUTHRIN/CN
=> d 123
L23 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    68359-37-5 REGISTRY
RN
ED
    Entered STN: 16 Nov 1984
CN
    Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
     cyano(4-fluoro-3-phenoxyphenyl)methyl ester (CA INDEX NAME)
OTHER NAMES:
    \alpha-Cyano-3-phenoxy-4-fluorobenzyl
    2,2-dimethyl-3-(2,2-dichlorovinyl)cyclopropanecarboxylate
    BAY-FCR 1272
CN
CN
    BAY-Vl 1704
CN
    Baythroid
CN
    Baythroid XL
    Beta-Baythroid
CN
CN
    Beta-cyfluthrin
CN
    Bulldock
CN
    Bulldock 125SC
CN
    Cyfluthrin
CN
    Cyfoxylate
CN
    Eulan SP
CN
   FCR 1272
CN
   FCR 4545
CN
   Optem PT 600
CN
   Renounce
CN
    Responsar
CN
    Solfac
CN
    Syfrutrin
CN
    Tempo 2
    Tempo Ultra
CN
CN
    Tombstone
   85782-82-7, 83855-46-3
DR
MF
    C22 H18 C12 F N O3
CI
    COM
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STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA,

CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB,

DDFU, DRUGU, EMBASE, HSDB\*, MEDLINE, MRCK\*, MSDS-OHS, PATDPASPC, PROMT,

RTECS\*, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU (\*File contains numerically searchable property data) Other Sources: EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

$$\begin{array}{c|c} & \text{Me} & \text{Me} & \text{OPh} \\ & \text{Cl}_2\text{C} & \text{CH} & \text{Cl}_N \end{array}$$

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1818 REFERENCES IN FILE CA (1907 TO DATE)

128 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1837 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e cyhalothrin/cn

E85	1	CYHALOFOP-PROPANIL MIXT./CN
E86	1	CYHALOFOP-TRICLOPYR MIXT./CN
E87	1>	CYHALOTHRIN/CN
E88	1	CYHALOTHRIN ACID/CN
E89	1	CYHALOTHRIN K/CN
E90	1	CYHALOTHRIN-DEF MIXT./CN
E91	1	CYHALOTHRIN-DIPTEREX MIXT./CN
E92	1	CYHALOTHRIN-EMAMECTIN BENZOATE MIXT./CN
E93	1	CYHALOTHRIN-MONOCROTOPHOS MIXT./CN
E94	1	CYHALOTHRIN-PARATHION MIXT./CN
E95	1	CYHALOTHRIN-PENTHIOPYRAD MIXT./CN
E96	1	CYHALOTHRIN-PHOXIM MIXT./CN

=> s e87

L24 1 CYHALOTHRIN/CN

=> d 124

L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

68085-85-8 REGISTRY

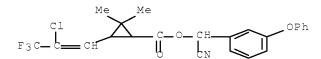
Entered STN: 16 Nov 1984

CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propen-1-y1)-

2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (CA INDEX NAME) OTHER CA INDEX NAMES:

CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1propenyl) -2, 2-

```
dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI)
OTHER NAMES:
    \alpha-Cyano-3-phenoxybenzyl 3-(2-chloro-3,3,3-trifluoroprop-1-en-1-
CN
vl)-
     2,2-dimethylcyclopropanecarboxylate
CN
    Clocythrin
    Coopertix
CN
CN
    Cyhalothrin
    Gongfu
CN
    Grenade
CN
    ICI-PP 563
CN
    PP 563
CN
CN
    Saber
    149436-99-7, 255725-86-1
DR
MF
    C23 H19 C1 F3 N O3
CI
    COM
     STN Files:
                AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
LC
BIOTECHNO, CA,
       CABA, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,
DRUGU,
       EMBASE, HSDB*, MEDLINE, MRCK*, MSDS-OHS, PATDPASPC, PIRA, PROMT,
RTECS*,
       TOXCENTER, USAN, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:
                     EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```



### http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 120 and (121-124)
           378 L20
           335 L21
          5855 L22
          1837 L23
           964 L24
L25
            82 L20 AND ((L21 OR L22 OR L23 OR L24))
=> s 125 and pesticides/ct
         51008 PESTICIDES/CT
L26
            13 L25 AND PESTICIDES/CT
=> s 125 and pests/ct
           618 PESTS/CT
L27
             1 L25 AND PESTS/CT
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 $\Rightarrow$  s 125 and insects/ct

2069 INSECTS/CT

L28 0 L25 AND INSECTS/CT

=> s 125 and insecticides/ct

79999 INSECTICIDES/CT

L29 71 L25 AND INSECTICIDES/CT

=> s 129 and 126

L30 10 L29 AND L26

=> s 126 and (py<2003 or ay<2003 or pry<2003)

22983868 PY<2003

4505976 AY<2003

3975310 PRY<2003

L31 2 L26 AND (PY<2003 OR AY<2003 OR PRY<2003)

 $\Rightarrow$  d 131 abs ti hitind ibib 1-2

L31 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN GI

$$\mathbb{R}^{4}$$
?
 $\mathbb{R}^{1}$ 
 $\mathbb{R}^{1}$ 
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{3}$ 
 $\mathbb{R}^{5}$ 
 $\mathbb{R}^{6}$ 
 $\mathbb{R}^{1}$ 
 $\mathbb{R}^{1}$ 

AΒ The invention provides title compds. I and their N-oxides and suitable salts [wherein: Y, V = N or CR4a; W = N, CH, or CR6; R1 = H, (un) substituted alkyl, alkenyl, alkynyl or cycloalkyl, alkylcarbonyl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un) substituted heterocyclic (N/O/S) ring; G = (un) substituted 5or 6-membered non-aromatic carbo- or heterocyclic ring; R4a, R4b = H, various carbon and heteroat. substituents; R5 = alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 = (halo)alk(en/yn)yl, OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino, (un) substituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also pertains to compns. for controlling invertebrate pests, comprising a biol. effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at

least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one addnl. biol. active compound or agent. Also disclosed are methods for controlling invertebrate pests by contact of the pests or their environment with said compds. Eighteen compds. I were prepared and tested. For instance, 3-chloro-2-hydrazinopyridine was cyclocondensed with di-Et maleate to give 55% Et 1-(3-chloro-2-pyridinyl)-3pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthranilic acid to give a benzoxazinone, O-mesylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II. In a test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Empoasca fabae.

Novel pyrazole-based anthranilamide insecticides and their preparation,

compositions, and use

IC ICM C07D401-00

28-8 (Heterocyclic Compounds (More Than One Hetero Atom)) CC Section cross-reference(s): 5

Acaricides ΙT Insecticides Pesticides

ACCESSION NUMBER: 2004:453202 CAPLUS Full-text

DOCUMENT NUMBER: 141:23526

TITLE: Novel pyrazole-based anthranilamide

insecticides and

their preparation, compositions, and use INVENTOR(S): Hughes, Kenneth Andrew; Lahm, George Philip;

Selby,

Thomas Paul

PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA PCT Int. Appl., 96 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATE	NO.			KIND DATE					APPL	ICAT	ION I	. O <i>l</i>		DATE	
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	-															
	WO 2	2004	0461	29		A2		2004	0603	•	WO 2	003-1	US36	167		
2003	31112	<														
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CH,	CN,		·	,	·	·	•		·	•	•	·	·	·	•	,
,	,		CO.	CR.	CU.	CZ.	DE.	DK,	DM.	DZ.	EC.	EE.	ES.	FI.	GB.	GD.
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TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI,
SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG
    AU 2003295491
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                                            AU 2003-295491
20031112 <--
    EP 1560820
                          Α2
                                20050810
                                          EP 2003-786682
20031112 <--
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MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                20050906 BR 2003-15714
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20031112 <--
     CN 1711255
                                20051221
                                            CN 2003-80103401
                          Α
20031112 <--
                          Τ
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     JP 2006514632
20031112 <--
    US 20060014808
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                                            US 2005-529612
20050330 <--
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                          Α
                                20050803
                                            MX 2005-5025
20050510 <--
PRIORITY APPLN. INFO.:
                                            US 2002-426693P
20021115 <--
                                            WO 2003-US36167
20031112
                         MARPAT 141:23526
OTHER SOURCE(S):
                         11
                               THERE ARE 11 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT
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L31 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN GI

$$\begin{bmatrix} \mathbb{R}^4 \end{bmatrix}_{n} \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^4 \\ \mathbb{$$

AB The title compds. [I; B = O, S; J = (un)substituted Ph, naphthyl, 5-6 membered heteroarom. ring, etc.; K, together with the two contiguous liking carbon atoms = a fused Ph, or fused pyridinyl, each optionally substituted with 1-4 R4; R3 = G, alkyl,

cycloalkyl, etc.; G = (un) substituted Ph, 5-6 membered heteroarom. ring, etc.; R4 = H, alkyl, haloalkyl, etc.; n = 1-4], useful for controlling invertebrate pests, were prepared E.g. a multi-step synthesis of II which provided very good level of plant protection (20% or less feeding damage) in in test on diamondback moth (Plutella xylostella)/radish plant, was given. This invention also pertains to certain compds. I and compns. for controlling invertebrate pests comprising a biol. effective amount of a compound I and at least one addnl. component selected from the group consisting of surfactants, solid diluents and liquid diluents. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

ACCESSION NUMBER: 2002:465981 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 137:47212

TITLE: Preparation of quinazolinones and

pyridopyrimidinones

for controlling invertebrate pests

INVENTOR(S): Annis, Gary David; Myers, Brian James; Selby,

Thomas

Paul; Stevenson, Thomas Martin; Zimmerman,

William

Thomas

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 180 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		ENT I		KIND DATE APPLICATION NO.						DATE						
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	- WO	2002	0481	15		A2		2002	0620		WO 2	001-	US46	629		
200	11203	<														
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CH,	CN,															
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GE,	GH,															
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LK,	LR,															
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PH,	PL,															
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,
UA,	UG,															
			US,	UZ,	VN,	YU,	ZA,	ZW								
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,
BE,	CH,															
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

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PRIORITY APPLN. INFO.: US 2000-254614P Ρ

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OTHER SOURCE(S): MARPAT 137:47212
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE

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RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

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5 L29 AND (PY<2003 OR AY<2003 OR PRY<2003)

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L32 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:453202 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 141:23526

TITLE: Novel pyrazole-based anthranilamide

insecticides and

their preparation, compositions, and use

Hughes, Kenneth Andrew; Lahm, George Philip; INVENTOR(S):

Selby,

Thomas Paul

PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	 KIND	DATE	APPLICATION NO.	DATE

WO 2004046129 A2 20040603 WO 2003-US36167

20031112 <--

A3 20040715 WO 2004046129

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GE, GH,

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NZ, OM,
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PRIORITY APPLN. INFO.:
20021115 <--
                                            WO 2003-US36167
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20031112
                        MARPAT 141:23526
OTHER SOURCE(S):
GΙ
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AΒ

The invention provides title compds. I and their N-oxides and suitable salts [wherein: Y, V = N or CR4a; W = N, CH, or CR6; R1 =

H, (un) substituted alkyl, alkenyl, alkynyl or cycloalkyl, alkylcarbonyl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un) substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un) substituted heterocyclic (N/O/S) ring; G = (un) substituted 5or 6-membered non-aromatic carbo- or heterocyclic ring; R4a, R4b = H, various carbon and heteroat. substituents; R5 = alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 = (halo)alk(en/yn)yl, OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino, (un) substituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also pertains to compns. for controlling invertebrate pests, comprising a biol. effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one addnl. biol. active compound or agent. Also disclosed are methods for controlling invertebrate pests by contact of the pests or their environment with said compds. Eighteen compds. I were prepared and tested. For instance, 3-chloro-2-hydrazinopyridine was cyclocondensed with di-Et maleate to give 55% Et 1-(3-chloro-2-pyridinyl)-3pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthranilic acid to give a benzoxazinone, O-mesylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II. In a test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Empoasca fabae.

L32 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:261833 CAPLUS Full-text

DOCUMENT NUMBER: 138:287669

TITLE: Preparation of pyrazolylcarbonyl pyridinyl

anthranilamides as arthropodicides

INVENTOR(S):
Zimmerman, William Thomas

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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LK, LR,														

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AΒ Title compds. [I; R1, R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halo, cyano, alkoxy, haloalkoxy, alkylthio, alkylsulfonyl, trialkylsilyl, etc.; R3 = H, alkyl, haloalkyl, halo, cyano, NO2, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkylthio, alkoxycarbonyl, etc.; R4 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R5 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halocycloalkyl, halo, cyano, CO2H, CONH2, NO2, OH, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, alkylcarbonyl, alkoxycarbonyl, trialkylsilyl, etc.], were prepared Thus, 1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H- pyrazole-5-carboxylic acid (preparation given) was stirred with (COCl)2 and cat. DMF in CH2Cl2 to give crude acid chloride, which was refluxed 3 h with 8-methyl-2H-3,1-benzoxazine-2,4(1H)dione (preparation given) and pyridine in MeCN to give 2-[1-(3chloro-2-pyridinyl)-3-trifluoromethyl-1H-pyrazol-5- yl]-8-methyl-4H-3,1-benzoxazin-4-one. The latter was refluxed 1.5 h with Me2CHNH2 to give 1-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1methylethyl)amino]carbonyl]phenyl]-3-trifluoromethyl-1H-pyrazole-5- carboxamide. This was stirred overnight with DBU in MeCN to give N-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1methylethyl)amino]carbonyl]phenyl]-5-trifluoromethyl-1H-pyrazole-3- carboxamide. The latter at 250 ppm on radishes preinfested with Plutella xylostella gave ≤10% feeding damage.

L32 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:242097 CAPLUS Full-text

DOCUMENT NUMBER: 138:267201

TITLE: Pesticidal compositions for coating plant

propagation

material containing anthranilamides

INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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PRIORITY APPLN. INFO.: US 2001-323941P P

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WO 2002-US30302 W

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OTHER SOURCE(S): MARPAT 138:267201

Ι

GΙ

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting.

L32 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154155 CAPLUS Full-text

DOCUMENT NUMBER: 138:200332

TITLE: Arthropodicidal anthranilamides

INVENTOR(S): Lahm, George Philip; Selby, Thomas Paul;

Stevenson,

Thomas Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT N		KIND DATE APPLICATION NO.						NO.		DATE				
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OTHER SOURCE(S):	MARPA	T 138:20033	32	
GI				

AB Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate pests. Arthropodicidal compns. containing anthranilamides I may further include addnl. biol. active compds. or agents selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, Bacillus thuringiensis sp. aizawai, B. thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi.

L32 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154154 CAPLUS Full-text

DOCUMENT NUMBER: 138:200331

TITLE: Method for controlling particular insect pests

by

applying anthranilamide compounds
INVENTOR(S): Lahm, George Philip; McCann, Stephen

Frederick; Patel,

Kanu Maganbhai; Selby, Thomas Paul; Stevenson,

Thomas

Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 150 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

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BE,	BG,		CII	037	O.F.	DE	DIZ		ПС		TD.	CD	CD		T TT	T 11
MC,	NL,		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	TE,	11,	LU,
,	,		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,

rat r	(ID																
ML, I	MK,		NE,	SN,	TD,	TG											
0000		24543				A1		2003	0227		CA	20	02-	2454	302		
2002		< 20023		51		A1		2003	0303		דו ב	20	02- <sup>-</sup>	3559	51		
20020			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>J</i>		AI		2003	0303		710	20	02.		<i>J</i>		
	AU 2					В2											
20020	EP 1		796			A1		2004	0512		EP	20	02-	7528	09		
20021			AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	٦,	IT,	LI,	LU,	NL,	SE,
MC, I	РТ,																
	י ווע	20040				LV, A2			MK, 0928						CZ,	EE,	SK
20020			JO T O .	40		AZ		2004	0920		по	20	04-	1042			
						АЗ											
20020		20020	0121	87		A		2004	1005		BR	20	02-	1218	7		
20021		 1541(	063			А		2004	1027		CN	20	02-	8159.	30		
20020																	
20020			5383	27		Т		2004	1224		JP	20	03	5202	89		
20021		~ 36898	317			В2		2005	0831								
		20040							0803		ZA	20	04-	33			
20020			2000	2.4		73		2005	0803		F7 7A	2.0	0.4	2.4			
20020		20040 <	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	34		А		2005	0803		ΔА	20	04	34			
		22622	231			C1		2005	1020		RU	20	04-	1075	13		
2002			4.0			-		0006	0700			0.0	0.0	F 2 0 4	4.0		
20020		53044 	42			А		2006	0728		NΖ	20	02-	5304	42		
	EP 3		304			A1		2008	0716		ΕP	20	08-	6481			
20020				DE	DC	CII	037	O.F.	DE	DIZ		,	по		ED.	CD	CD.
IE,		K:	A1,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	E.E	<u> </u>	ES,	ΕΙ,	FK,	GB,	GK,
,	ŕ					NL,											
2002			0099	11		A		2005	0311		ZA	20	03-	9911			
2003			0075	372		A1		2005	0407		US	20	04-	4831	15		
20040	0107	<															
20040		20041	0 0 MP	013		A		2007	0309		IN	20	04-I	MN13			
2004		20040	0013	22		А		2004	0520		MX	20	04-	1322			
20040																	
2004		34720	02			В1		2008	0717		KR	20	04-	7021	63		
2004		~ 2005(	0418	80		А		2005	0217		JP	20	04-	2589.	23		
20040																	
20050		20051	4N00	438		A		2005	1202		IN	20	05-I	MN43	8		
2003		20080	0275	061		A1		2008	1106		US	20	08-	1411	70		
2008																	
PRIOR 2001			LN.	INFO	.:						US	20	01-	3119	19P		P
2001	, U T O										US	20	01-	3241	73P		P
2001	921	<											^ -				_
2001	7921	<									US	20	01-	3241.	28P	,	P
2001	<u>.</u>																

20011210		US	2001-341894P	P
20011219 <		US	2002-369659P	P
20020402 <		US	2002-369661P	P
20020402 <				
20020813 <		EP	2002-750482	A3
20020813 <		JP	2003-520290	А3
		WO	2002-US25613	W
20020813 <		US	2004-483115	A1
20040107		TNI	2004-MN13	A3
20040108		ΤIV	2004-MN13	AS
OTHER SOURCE(S):	MARPAT 138:200331			

AB Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran insect pests. Insecticidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.

# http://www.cas.org/support/stngen/stndoc/properties.html

=>

GΙ

Uploading C:\Program Files\Stnexp\Queries\10579076 genus
anthranilamide.str

chain nodes : 1 3 4 7 8 9

ring nodes :

2 5 6 10 11 12 13 14 15 16 17 18 19 20 21 22 23

chain bonds :

1-4 3-4 4-19 5-13 7-10 7-8 7-9 8-14

ring bonds :

 $2-13 \quad 2-17 \quad 5-10 \quad 5-6 \quad 6-12 \quad 10-11 \quad 11-12 \quad 13-15 \quad 14-19 \quad 14-20 \quad 15-16$ 

16-18 17-18 19-21 20-22 21-23 22-23

exact/norm bonds :

1-4 3-4 5-10 5-6 5-13 6-12 7-8 7-9 8-14 10-11 11-12

exact bonds :

4-19 7-10

normalized bonds :

## Match level :

1:CLASS 2:Atom 3:CLASS 4:CLASS 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 23:Atom

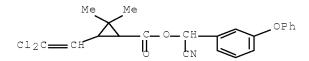
## L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

```
=> e cypermethrin/cn
E1
            1
                 CYPERIN/CN
Ε2
            1
                  CYPERKILL/CN
E3
            1 --> CYPERMETHRIN/CN
                 CYPERMETHRIN, D-TRANS-A/CN
E4
           1
E5
            1
                 CYPERMETHRIN, D-TRANS-B/CN
            1
                 CYPERMETHRIN-ABAMECTIN MIXT./CN
Ε6
Ε7
           1
                 CYPERMETHRIN-ACEPHATE MIXT./CN
           1
                 CYPERMETHRIN-ACETAMIPRID MIXT./CN
E9
           1
                 CYPERMETHRIN-ALLYL ISOTHIOCYANATE MIXT./CN
                 CYPERMETHRIN-AVERMECTIN MIXT./CN
E10
           1
E11
            1
                  CYPERMETHRIN-BACILLUS THURINGIENSIS MIXT./CN
E12
            1
                  CYPERMETHRIN-BENSULTAP MIXT./CN
=> set expand continuous
SET COMMAND COMPLETED
=> s e3
L2
            1 CYPERMETHRIN/CN
=> d 12
L2
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN
    52315-07-8 REGISTRY
    Entered STN: 16 Nov 1984
ED
CN
    Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
     cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
    \alpha-Cyano-m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
    dimethylcyclopropanecarboxylate
CN
    Agrometrin
    Agrothrin
CN
CN
    Almetrin
    Ambush C
CN
CN
    Ambush CY
CN
    Ammo
CN
    Ammo (pesticide)
CN
   Antiborer 3767
CN
   Ardap
CN
   Arrivo
CN
   Asymmethrin
CN
   Bandit
CN
    Barrage
    Barricade
CN
CN
    Barricade (insecticide)
CN
    Barricade 10EC
CN
    Basathrin
CN
    Battery (insecticide)
CN
    Beta-cypermethrin
    CCN 52
CN
CN
    Chinimix
CN
    Chinmix
CN
   Cilcord
CN
   cis-Cypermethrin
CN
    Colt
```

```
CN
     Creokhin
CN
     Cybil
CN
     Cymbush
CN
     Cymet
CN
     Cympa-Ti
CN
     Cymperator
CN
     Cyperco
CN
     Cyperil
     Cyperkill
CN
    Cypermethrin
CN
CN
    Cypor
CN
     Demon
CN
     Demon TC
CN
     Dimcyp
CN
     Drago
CN
     Ecofleece Sheep Dip (Non-OP)
CN
     Ectomin
CN
     Ectopor
CN
     Excis
CN
    EXP 5598
CN
    Fenom
CN
    Fenom (pesticide)
CN
     Flytick
     FMC 30980
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL
for
     DISPLAY
     727730-89-4, 97955-44-7, 139203-31-9, 137497-61-1, 69865-47-0,
     142443-95-6, 146909-55-9, 86752-99-0, 86753-92-6, 88161-75-5,
159940-28-0,
     186554-45-0
     C22 H19 C12 N O3
MF
CI
     COM
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
LC
     STN Files:
BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
       DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB,
IPA,
       MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER,
ULIDAT, USAN,
       USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources: EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```



```
5823 REFERENCES IN FILE CA (1907 TO DATE)
```

185 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5861 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e delta-methrin/cn
     1 DELTA-LYSIN II/CN
           1
                DELTA-LYSIN II (STAPHYLOCOCCUS WARNERI)/CN
E14
E15
           0 --> DELTA-METHRIN/CN
E16
           1
                DELTA-NOTCH-LIKE EGF REPEAT-CONTAINING TRANSMEMBRANE
(HUMAN
                CLONE MGC:33398 IMAGE:4820343)/CN
E17
          1
               DELTA-PLASMINOGEN (SYNTHETIC HUMAN)/CN
E18
           1
                DELTA-SEAL/CN
                DELTA-STAB/CN
           1
E19
               DELTA-SUBUNIT OF ETHYLBENZENE DEHYDROGENASE
           1
E20
(AZOARCUS STRAIN
                 EBN1 GENE EBDD)/CN
E21
           1
                DELTA-TONE 9000/CN
                DELTA-V (ERYTHROVIRUS B19 CLONE F-2 N-TERMINAL
E22
           1
FRAGMENT)/CN
E23
                DELTA-V (ERYTHROVIRUS B19 CLONE F-3 N-TERMINAL
FRAGMENT)/CN
E24
                DELTA-VALEROLACTAM/CN
          1
=> e delta methrin/cn
               DELTA KURE COREACTANT/CN
E25
       1
                DELTA KURE RESIN/CN
           1
E26
           0 --> DELTA METHRIN/CN
E27
          1 DELTA METHYL IONONE/CN
E28
E29
          1
                DELTA NAIP PROTEIN (MOUSE STRAIN C57BL/6J ISOLATE
B6-235-SP6
                 CLONE B6-235 GENE DELTANAIP FRAGMENT/CN
                DELTA NE 200/CN
E30
          1
                DELTA P/CN
E31
           1
                DELTA PA 441/CN
E32
           1
                DELTA PA 4410/CN
E33
           1
E34
          1
                DELTA PA 442/CN
E35
           1
                DELTA PA 445/CN
E36
           1
                DELTA PA 450/CN
=> e delta!methrin/cn
E37
          1
                DELTA TUBULIN (PLASMODIUM FALCIPARUM STRAIN 3D7 GENE
PFI1635
                W)/CN
E38
           1
                DELTA X 9/CN
           0 --> DELTA!METHRIN/CN
                DELTA' SUBUNIT (STREPTOCOCCUS PNEUMONIAE STRAIN R6
E40
           1
GENE HOLB
                 )/CN
E41
           1
                DELTA' SUBUNIT (YERSINIA PESTIS STRAIN CO92 GENE
HOLB)/CN
E42
            1
                DELTA(12)-FATTY ACID DEHYDROGENASE (PROCHLOROCOCCUS
MARINUS
                 STRAIN MIT 9312)/CN
     1
E43
                DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
```

```
TRANSFERAS
                   E (ESCHERICHIA COLI 0157:H7 STRAIN EDL933 GENE
MIAA)/CN
E44
             1
                  DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                   E (ESCHERICHIA COLI STRAIN 0157:H7 GENE ECS5147)/CN
E45
                   DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                   E (SALMONELLA ENTERICA TYPHIMURIUM STRAIN LT2; SGSC
1412; AT
                   CC 700720 GENE MIAA)/CN
E46
             1
                   DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                   E (SHIGELLA FLEXNERI STRAIN 301 GENE MIAA)/CN
E47
                   DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
             1
TRANSFERAS
                   E (YERSINIA PESTIS STRAIN KIM GENE MIAA)/CN
E48
                   DELTA(2)-ISOPENTENYLPYROPHOSPHATE TRNA-ADENOSINE
             1
TRANSFERASE
                    (ACINETOBACTER BAUMANNII STRAIN ATCC 17978)/CN
=> e esfenvalerate/cn
                 ESF 6/CN
E49
           1
            1
E50
                  ESFAR/CN
E51
            1 --> ESFENVALERATE/CN
E52
            1
                 ESFENVALERATE-AMITRAZ MIXT./CN
E53
            1
                 ESFENVALERATE-CHLORPYRIFOS MIXT./CN
E54
            1
                 ESFENVALERATE-DEF MIXT./CN
E55
            1
                 ESFENVALERATE-FENITROTHION MIXT./CN
                 ESFENVALERATE-IKI 220 MIXT./CN
            1
E56
            1
                 ESFENVALERATE-IMIDACLOPRID MIXT./CN
E57
            1
                 ESFENVALERATE-PENTHIOPYRAD MIXT./CN
E58
E59
            1
                 ESFENVALERATE-PIPERONYL BUTOXIDE MIXT./CN
E60
            1
                 ESFENVALERATE-THIODAN MIXT./CN
=> s e51
L3
             1 ESFENVALERATE/CN
=> d 13
L3
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    66230-04-4 REGISTRY
RN
    Entered STN: 16 Nov 1984
ED
     Benzeneacetic acid, 4-chloro-\alpha-(1-methylethyl)-,
     (S)-cyano(3-phenoxyphenyl)methyl ester, (\alphaS)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Benzeneacetic acid, 4-chloro-\alpha-(1-methylethyl)-,
     cyano(3-phenoxyphenyl) methyl ester, [S-(R^*,R^*)]-
OTHER NAMES:
     (S)-\alpha-Cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)isovalerate
CN
     (S,S)-Fenvalerate
CN
     \alpha-Sum
CN
     1S,1'S-Fenvalerate
CN
    A\alpha
     Asana
CN
CN
    Asana XL
```

```
CN Esfenvalerate CN Fenvalerate \alpha
```

CN Fenvalerate  $A\alpha$ 

CN OMS 3023

CN S 1844

CN S 5602Aα

CN Sumi-alfa

CN Sumi-alpha

CN Sumi-Gold

CN Sumicidin  $A\alpha$ 

CN Sumidan

FS STEREOSEARCH

DR 72650-28-3

MF C25 H22 C1 N O3

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, CA, CAPLUS,

CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, HSDB\*, MRCK\*,

 ${\tt MSDS-OHS}, {\tt PROMT}, {\tt RTECS*}, {\tt SPECINFO}, {\tt TOXCENTER}, {\tt ULIDAT}, {\tt USPAT2}, {\tt USPATFULL}$ 

(\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

970 REFERENCES IN FILE CA (1907 TO DATE)

72 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

981 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e ethofenprox/cn
```

E61	1	ETHOFAT O 15/CN
E62	1	ETHOFAT O 20/CN
E63	1>	ETHOFENPROX/CN
E64	1	ETHOFENPROX-DACONIL MIXT./CN
E65	1	ETHOFENPROX-DACONIL-PASSPORT MIXT./CN
E66	1	ETHOFENPROX-DIAFENTHIURON MIXT./CN
E67	1	ETHOFENPROX-IKI 220 MIXT./CN
E68	1	ETHOFENPROX-THIODICARB MIXT./CN
E69	1	ETHOFENPROX-TOLFENPYRAD MIXT./CN
E70	1	ETHOFIBRATE/CN
E71	1	ETHOFOR RO 40/CN
E72	1	ETHOFORM/CN

```
L4
            1 "ESFENVALERATE-CHLORPYRIFOS MIXT."/CN
```

=> s e63

1 ETHOFENPROX/CN L5

=> d 15

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN T.5

80844-07-1 REGISTRY RN

ED Entered STN: 16 Nov 1984

CN Benzene, 1-[[2-(4-ethoxyphenyl)-2-methylpropoxy]methyl]-3-phenoxy-(CA

INDEX NAME)

#### OTHER NAMES:

CN 2-(4-Ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether

CN 4-Ethoxyneophyl 3-phenoxybenzyl ether

CN Ethofenprox

CN Ethophenprox

CN Ethoproxyfen

CN Ethoproxyphen

CN Etof

CN Etofenprox

MTI 500 CN

SA 130301 CN

CN Trebon

C25 H28 O3 MF

CI COM

LC AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, CA, STN Files: CABA,

CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,

DRUGU, MEDLINE, MRCK\*, PROMT, RTECS\*, TOXCENTER, USAN, USPAT2, USPATFULL

(\*File contains numerically searchable property data) Other Sources: WHO

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

763 REFERENCES IN FILE CA (1907 TO DATE)

92 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

768 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e fenpropathrin/cn

E73 1 FENPRINAST HYDROCHLORIDE/CN

E74 1 FENPROPANATE/CN E75 1 --> FENPROPATHRIN/CN

```
E76
                  FENPROPATHRIN-ABAMECTIN MIXT./CN
            1
E77
            1
                  FENPROPATHRIN-ACEPHATE MIXT./CN
E78
            1
                  FENPROPATHRIN-CLOFENTEZINE MIXT./CN
E79
            1
                  FENPROPATHRIN-EMAMECTIN BENZOATE MIXT./CN
            1
E80
                 FENPROPATHRIN-ENDOSULFAN MIXT./CN
E81
            1
                 FENPROPATHRIN-FENBUTATIN OXIDE MIXT./CN
E82
            1
                 FENPROPATHRIN-HEXYTHIAZOX MIXT./CN
E83
            1
                 FENPROPATHRIN-IKI 220 MIXT./CN
            1
                 FENPROPATHRIN-IVERMECTIN MIXT./CN
E84
=> s e75
             1 FENPROPATHRIN/CN
L6
=> d 16
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
1.6
RN
     39515-41-8 REGISTRY
ΕD
     Entered STN: 16 Nov 1984
CN
     Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-,
     cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
CN
    (±)-Fenpropathrin
CN
     \alpha-Cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate
CN
     2,2,3,3-Tetramethylcyclopropanecarboxylic acid
     cyano(3-phenoxyphenyl)methyl ester
CN
    Danimen
CN
    Danitol
    Danitol 10EC
CN
CN
    Danitol Fiori
CN
   Fenpropanate
CN
   Fenpropathrin
CN
   Kilumal
CN
   Meiothrin
CN
   Meothrin
CN
    Miothrin
CN
    Rodv
    S 3206
CN
    SD 41706
CN
CN
    Smash
CN
    Tame
CN
    WL 41706
CN
    XE 938
DR
     64257-84-7
MF
    C22 H23 N O3
CI
    COM
                 AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
     STN Files:
BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
       DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
MRCK*,
      MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT,
USPAT2,
       USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:
                     EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

$$\stackrel{\text{Me}}{\underset{\text{Me}}{\bigvee}} \stackrel{\text{Me}}{\underset{\text{C}}{\bigvee}} \circ \text{Ph}$$

1518 REFERENCES IN FILE CA (1907 TO DATE)
82 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1536 REFERENCES IN FILE CAPLUS (1907 TO DATE)

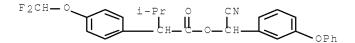
```
=> e fenvalerate/cn
E85
            1
                  FENURONE/CN
E86
             1
                   FENVAL/CN
E87
            1 --> FENVALERATE/CN
            1
                  FENVALERATE A/CN
E88
E89
            1
                   FENVALERATE B/CN
            1
                  FENVALERATE AA/CN
E90
E91
            1
                  FENVALERATE AB/CN
E92
            1
                  FENVALERATE-AZADIRACHTIN MIXT./CN
            1
E93
                  FENVALERATE-CHLORPYRIFOS MIXTURE/CN
E94
            1
                  FENVALERATE-DEF MIXT./CN
E95
            1
                  FENVALERATE-DIAZINON MIXT./CN
                  FENVALERATE-DICHLORVOS MIXT./CN
E96
            1
=> s e87
L7
             1 FENVALERATE/CN
=> d 17
L7
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
     51630-58-1 REGISTRY
RN
     Entered STN: 16 Nov 1984
ΕD
     Benzeneacetic acid, 4-chloro-\alpha-(1-methylethyl)-,
     cyano(3-phenoxyphenyl)methyl ester (CA INDEX NAME)
OTHER NAMES:
CN
     \alpha-Cyano-3-phenoxybenzyl 2-(4-chlorophenyl)isovalerate
CN
     Agrofen
CN
    Aqmatrine
CN
     Belmark
CN
     Cyano(3-phenoxyphenyl)methyl 4-chloro-\alpha-(1-
     methylethyl) benzeneacetate
CN
     Ectrin
CN
     Evercide 2362
CN
     Fenaxin
CN
     Fenkem
CN
    Fenkill
    Fenoxin
CN
CN
    Fenval
```

```
CN
    Fenvalerate
CN
    Furitrothion
CN
    Hafen
CN
     Insectral
CN
    Phenaxin
CN
    Phenoxin
CN
    Phenvalerate
CN
   Pydrin
CN
    S 5602
CN
    Sanmarton
CN
    SCS
CN
    SD 43775
CN
    Sumicidin
CN
    Tatafen
CN
    Tribute
CN
    Valour
CN
    Vapcocidin
CN
    WL 43775
DR
    131641-62-8
MF
    C25 H22 C1 N O3
CI
    COM
    STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
LC
BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
       DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB,
       IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*,
       SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources: EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

4396 REFERENCES IN FILE CA (1907 TO DATE)
125 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4413 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e flucythrinate/cn
E97
            1
                 FLUCYCLOXURON-IKI 220 MIXT./CN
E98
            1
                  FLUCYCLOXURON-THETA-CYPERMETHRIN MIXT./CN
E99
            1 --> FLUCYTHRINATE/CN
                  FLUCYTHRINATE-IKI 220 MIXT./CN
E100
            1
            1
                  FLUCYTHRINATE-MALATHION MIXT./CN
E101
E102
            1
                 FLUCYTHRINATE-MONOCROTOPHOS MIXT./CN
           1
E103
                 FLUCYTHRINATE-PENTHIOPYRAD MIXT./CN
```

```
1 FLUCYTOSIN/CN
E104
            1
                 FLUCYTOSINE/CN
E105
E106
            1
                 FLUDAC/CN
            1
E107
                 FLUDALANINE/CN
           1
E108
                 FLUDARA/CN
=> s e 99
L8
            1 FLUCYTHRINATE/CN
=> d 18
L8
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN
    70124-77-5 REGISTRY
ED
    Entered STN: 16 Nov 1984
    Benzeneacetic acid, 4-(difluoromethoxy)-\alpha-(1-methylethyl)-,
    cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
CN
    \alpha-Cyano-3-phenoxybenzyl 2-[p-(difluoromethoxy)phenyl]isovalerate
CN
    AC 222705
CN
   CyBolt
CN
   Flucythrinate
   Fluorocythrin
CN
   Pav-Off
    102984-46-3, 71611-31-9
DR
   C26 H23 F2 N O4
MF
CI
    COM
    STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
      CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB.
      DDFU, DRUGU, EMBASE, HSDB*, MEDLINE, MRCK*, PROMT, RTECS*,
TOXCENTER,
      USPAT2, USPATFULL, VETU
        (*File contains numerically searchable property data)
     Other Sources: EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```



739 REFERENCES IN FILE CA (1907 TO DATE)

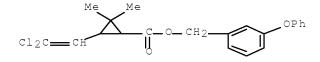
66 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

747 REFERENCES IN FILE CAPLUS (1907 TO DATE)

E111 1 --> PERMETHRIN/CN

```
E112
           1
                 PERMETHRIN CARBOXYLESTERASE/CN
E113
            1
                 PERMETHRIN ESTERASE/CN
E114
            1
                 PERMETHRIN HYDROLASE/CN
           1
                 PERMETHRIN MONOOXYGENASE/CN
E115
E116
           1
                 PERMETHRIN-ACEPHATE MIXT./CN
E117
           1
                 PERMETHRIN-AMITRAZ MIXT./CN
E118
           1
                 PERMETHRIN-BASSA-MALATHION MIXT./CN
E119
           1
                PERMETHRIN-BENDIOCARB MIXT./CN
                PERMETHRIN-CHLORDIMEFORM MIXT./CN
E120
           1
=> s e111
L9
            1 PERMETHRIN/CN
=> d 19
L9
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN
    52645-53-1 REGISTRY
ED
    Entered STN: 16 Nov 1984
CN
    Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
     (3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
    (3-Phenoxyphenyl) methyl 2,2-dimethyl-3-(2,2-
    dichlorovinyl)cyclopropanecarboxylate
CN
     3-Phenoxybenzyl 2,2-dimethyl-3-(2,2-
dichlorovinyl)cyclopropanecarboxylate
     3-Phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
dimethylcyclopropanecarboxylate
CN
    Acticin
CN
    Adion
CN
    Ambush
CN
   Aninsen Per-30
CN Anomethrin N
CN Antiborer 3768
CN Astro
CN Bansect
   Bematin 987
CN
CN
    BioKill
CN
    Butox 50
CN
    Chinetrin
CN
    Cooper
CN
    Coopex
CN
    Corsair
CN
    Damminix
CN
    Dancide PS 150
CN Dichlorophenothrin
CN Diffusil H
CN Dragnet
CN
    Dragnet FT
CN
    Dragon
CN
    Ecsumin
CN
    Ectiban
CN
    Efmethrin
CN
    Eliminator Ant, Flea & Tick Killer
CN
    Elimite
CN
    Eulan SPA
CN
    Exmin
```

```
CN
     FMC 33297
    FMC 41655
CN
CN
     ICI-PP 557
CN
     Imperator
CN
    Insectal Plus
CN
    Insorbcid MP
CN
    Ipitox
CN
    JF 7065
CN
    Kaleait
CN
    Kavil
CN
    Kestrel
CN
    Kestrel (pesticide)
CN
    Kudos
CN
    Last Call
CN
    Lyclear
    m-Methoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
CN
dimethylcyclopropanecarboxylate
    m-Phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
dimethylcyclopropanecarboxylate
CN
    Mitin BC
CN
    Permethrin
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL
     DISPLAY
     57608-04-5, 60018-94-2, 63364-00-1, 75497-64-2, 93388-66-0
DR
    C21 H20 C12 O3
MF
CI
     STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE,
LC
BEILSTEIN*,
       BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS,
CHEMLIST,
       CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB,
IFIPAT,
       IFIUDB, IMSPRODUCT, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS,
PIRA,
       PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2,
USPATFULL,
       VETU
         (*File contains numerically searchable property data)
                    EINECS**, WHO
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```



5980 REFERENCES IN FILE CA (1907 TO DATE)
157 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6002 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e taufluvalinate/cn
      1
E121
                  TAUFENIN/CN
           1
E122
                  TAUFERIN/CN
E123
           0 --> TAUFLUVALINATE/CN
E124
           1
                 TAUFON/CN
E125
           1
                 TAUGLICOLCILLIN/CN
           1
                 TAUKARD/CN
E126
E127
            1
                 TAULIN/CN
E128
           1
                 TAULIZ/CN
E129
           1
                 TAUMIDRINE/CN
E130
           1
                 TAUMUSTINE/CN
E131
           1
                 TAUMYCIN A/CN
E132
           1
                 TAUMYCIN B/CN
=> e fluvalinate/cn
E133
           1
                 FLUTROPIUM BROMIDE/CN
           1
E134
                 FLUVAL/CN
E135
           1 --> FLUVALINATE/CN
E136
           1
                 FLUVALINATE-AMITRAZ MIXT./CN
           1
                 FLUVALINATE-BROMFENVINPHOS MIXT./CN
E137
           1
                 FLUVALINATE-BROMOPROPYLATE MIXT./CN
E138
E139
           1
                FLUVALINATE-CHLORPYRIFOS MIXT./CN
                FLUVALINATE-HEPTENOPHOS MIXT./CN
E140
           1
E141
           1
                FLUVALINATE-MALATHION MIXT./CN
E142
           1
                 FLUVALINATE-PENTHIOPYRAD MIXT./CN
E143
           1
                 FLUVALINATE-TOLFENPYRAD MIXT./CN
E144
           1
                 FLUVAROL/CN
=> s e135
L10
            1 FLUVALINATE/CN
=> d 110
L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    69409-94-5 REGISTRY
RN
    Entered STN: 16 Nov 1984
ΕD
    Valine, N-[2-chloro-4-(trifluoromethyl)phenyl]-,
    cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER CA INDEX NAMES:
    DL-Valine, N-[2-chloro-4-(trifluoromethyl)phenyl]-,
     cyano(3-phenoxyphenyl)methyl ester
OTHER NAMES:
CN
   Fluvalinate
CN
    ZR 3210
DR
   79472-91-6
MF
   C26 H22 C1 F3 N2 O3
CI
   COM
LC
    STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,
CABA,
      CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU,
DRUGU,
      EMBASE, HSDB*, MEDLINE, MRCK*, MSDS-OHS, PATDPASPC, PROMT,
RTECS*,
      TOXCENTER, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
```

```
Pho CH O CH NH CF3
```

```
824 REFERENCES IN FILE CA (1907 TO DATE)
```

54 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

831 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e tralomethrin/cn
E145
            1
                  TRALKOXYDIM-TRIFLURALIN MIXT./CN
E146
            1
                   TRALOCYTHRIN/CN
E147
            1 --> TRALOMETHRIN/CN
E148
                  TRALOMETHRIN-ENDOSULFAN MIXT./CN
            1
E149
            1
                  TRALOMETHRIN-IKI 220 MIXT./CN
E150
            1
                  TRALOMETHRIN-PROPICONAZOLE MIXT./CN
E151
             1
                   TRALONIDE/CN
                   TRALPUSH PROTEIN (HUMAN CLONE HCP38530-
E152
             1
197000064918009 GENE
                  TRALPUSH)/CN
                  TRAM (AGROBACTERIUM TUMEFACIENS GENE TRAM)/CN
E153
             1
E154
                  TRAM (BACTEROIDES FRAGILIS STRAIN YCH46)/CN
             1
E155
                  TRAM (CITROBACTER FREUNDII GENE TRAM)/CN
             1
                  TRAM (ERWINIA AMYLOVORA STRAIN LEBB66 COUNTRY
E156
             1
LEBANON PLASMI
                  D PEL60 GENE TRAM)/CN
=> s e147
L11
            1 TRALOMETHRIN/CN
=> d 111
L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    66841-25-6 REGISTRY
RN
ΕD
     Entered STN: 16 Nov 1984
     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1,2,2,2-
tetrabromoethyl)-,
     cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
    Bengal Fire Ant Killer
CN
    HAG 107
CN
    RU 25472
CN
     SAGA
CN
CN
     Scout
    Scout X-tra
CN
CN
     Tracker
CN
     Tralomethrin
    81604-63-9
DR
```

MF C22 H19 Br4 N O3

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, CA, CAPLUS,

CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, HSDB\*, MEDLINE,

MRCK\*, MSDS-OHS, PIRA, PROMT, RTECS\*, TOXCENTER, ULIDAT, USPAT2, USPATFULL

(\*File contains numerically searchable property data)
Other Sources: EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

454 REFERENCES IN FILE CA (1907 TO DATE)

72 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

458 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e	bifenthrin/cn	
E157	1	BIFENOX-SAP MIXT./CN
E158	1	BIFENOX-TRIFLURALIN MIXT./CN
E159	1>	BIFENTHRIN/CN
E160	1	BIFENTHRIN-ACEPHATE MIXT./CN
E161	1	BIFENTHRIN-ACETAMIPRID MIXT./CN
E162	1	BIFENTHRIN-ACRINATHRIN MIXT./CN
E163	1	BIFENTHRIN-AMITRAZ MIXT./CN
E164	1	BIFENTHRIN-ATRAZINE MIXT./CN
E165	1	BIFENTHRIN-CARBOSULFAN MIXT./CN
E166	1	BIFENTHRIN-CHLORDIMEFORM MIXT./CN
E167	1	BIFENTHRIN-CLOTHIANIDIN MIXT./CN
E168	1	BIFENTHRIN-CYFLUTHRIN MIXT./CN
-> 0	0150	

=> s e159

L12 1 BIFENTHRIN/CN

=> d 112

L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 82657-04-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN Cyclopropanecarboxylic acid, 3-[(12)-2-chloro-3,3,3-trifluoro-1-propen-1-

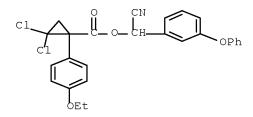
y1]-2, 2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,

```
(1R,3R)-rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-
propenyl)-2,2-
     dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,
     [1\alpha, 3\alpha(Z)] - (\pm) -
     Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-
CN
propenyl]-
     2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,
(1R, 3R) -rel-
     (9CI)
OTHER NAMES:
     AGST 02002
CN
     Bifenthrin
CN
CN
     Bifenthrine
CN
     Biflex
CN
    Biflex FT
CN
    Biphenate
CN
    Biphenthrin
CN
     Biphentrin
CN
     Brigade
CN
     Brigade 10WP
CN
     Brigata Flo
     Capture
CN
     Capture (pesticide)
CN
CN
     Capture LFR
     Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-
CN
propeny1)-2,2-
     dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,
     [1\alpha, 3\alpha(Z)] –
CN
     Discipline
     Empower
CN
CN
     Fanfare
     FMC 54800
CN
CN
    Kiros EV
CN
     Onyx
CN
     Onyx (insecticide)
CN
     Seizer
CN
     Semafor
CN
     Silencer
CN
     Talstar
CN
     TalstarOne
FS
     STEREOSEARCH
     92880-79-0, 107497-60-9, 107538-32-9
DR
     C23 H22 C1 F3 O2
MF
CI
     COM
LC
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, CA,
     STN Files:
CABA,
       CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB,
EMBASE,
       HSDB*, MEDLINE, MRCK*, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2,
USPATFULL
         (*File contains numerically searchable property data)
Relative stereochemistry.
Double bond geometry as shown.
```

$$\begin{array}{c|c} C1 & Me & Me \\ \hline & Z & R & \\ \hline & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

1698 REFERENCES IN FILE CA (1907 TO DATE)
104 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1730 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e cycloprothrin/cn
E169
             1
                  CYCLOPROPYNYL CATION/CN
E170
             1
                   CYCLOPROPYNYLIDYNE/CN
E171
             1 --> CYCLOPROTHRIN/CN
E172
            1
                  CYCLOPROTHRIN-IKI 220 MIXT./CN
E173
             1
                  CYCLOPROTHRIN-MONOCROTOPHOS MIXT./CN
E174
                  CYCLOPROTHRIN-PENTHIOPYRAD MIXT./CN
             1
E175
             1
                  CYCLOPROTOBULOXINE C/CN
E176
             1
                   CYCLOPROTOBUXINAMINE/CN
             1
E177
                   CYCLOPROTOBUXINE A/CN
E178
             1
                   CYCLOPROTOBUXINE C/CN
E179
             1
                  CYCLOPROTOBUXINE C, N-ISOBUTYRYL-/CN
E180
             1
                  CYCLOPROTOBUXINE D/CN
=> s e171
L13
             1 CYCLOPROTHRIN/CN
=> d 113
L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
     63935-38-6 REGISTRY
RN
ED
     Entered STN: 16 Nov 1984
     Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-,
CN
     cyano(3-phenoxyphenyl) methyl ester (CA INDEX NAME)
OTHER NAMES:
     Cycloprothrin
CN
CN
     Cyclosal
CN
    Cyclosal (insecticide)
CN
     GH 414
     NK 8116
CN
CN
     Phencyclate
MF
     C26 H21 C12 N O4
CI
LC
     STN Files:
                 AGRICOLA, AQUIRE, BIOSIS, CA, CAPLUS, CASREACT, CBNB,
       CHEMCATS, CHEMLIST, CIN, PROMT, RTECS*, TOXCENTER, USPAT2,
USPATFULL
         (*File contains numerically searchable property data)
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E204

1

FLUSPIRILINE/CN

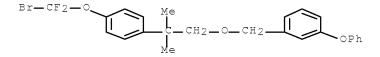
#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

177 REFERENCES IN FILE CA (1907 TO DATE) 58 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

180 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e eflusilinate/cn
E181
        1
                EFLUMAST/CN
E182
           1
                EFLUSILANAT/CN
           0 --> EFLUSILINATE/CN
E183
E184
            1
                EFLUX PROTEIN (FRANCISELLA TULARENSIS TULARENSIS
STRAIN FSC
                 198)/CN
E185
          1
                EFLUX PROTEIN (FRANCISELLA TULARENSIS TULARENSIS
STRAIN SCHU
                 S4)/CN
E186
            1
                EFM 2E02/CN
E187
            1
                 EFMA/CN
E188
           1
                 EFMETHRIN/CN
E189
           1
                EFN 4230/CN
E190
           1
                EFNA2-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53535
IMAGE:557
                 2815)/CN
E191
            1
                EFNA3-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:64593
IMAGE:688
                 1147)/CN
E192
          1
                EFNB1 PROTEIN (MOUSE STRAIN FVB/N CLONE MGC:11458
IMAGE: 2648
                 527)/CN
=> e flusilinate/cn
E193
         1
               FLUSILFOCON/CN
           1
E194
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E195
           0 --> FLUSILINATE/CN
E196
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E197
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E198
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E199
E200
           1
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E206
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E209
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                 FUBOL/CN
E210
            1
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E211
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                 FUBP1 PROTEIN (HUMAN CLONE IMAGE: 4330984 GENE
FUBP1)/CN
E212
                 FUBP1 PROTEIN (HUMAN CLONE MGC:29580
IMAGE: 4891583)/CN
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IMAGE:554
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=> s e207
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L14
=> d 114
L14 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    111872-58-3 REGISTRY
ED
    Entered STN: 19 Dec 1987
    Benzene, 1-[[2-[4-(bromodifluoromethoxy)phenyl]-2-
methylpropoxy]methyl]-3-
     phenoxy- (CA INDEX NAME)
OTHER NAMES:
CN
    4-Bromodifluoromethoxyneophyl 3-phenoxybenzyl ether
CN
    Anniverse
CN
   Brofenprox
CN
   Fubfenprox
CN
    Halfenprox
    MTI 732
CN
CN
    Sirbon
MF
    C24 H23 Br F2 O3
CI
    COM
SR
    CA
LC
     STN Files: ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CBNB,
CHEMCATS,
       CHEMLIST, TOXCENTER, USPAT2, USPATFULL
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162 REFERENCES IN FILE CA (1907 TO DATE)

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E217 1 RESLOOM M 75/CN
             1
                    RESLOOM RM 441/CN
          1 --> RESMETHRIN/CN
E219
E219 1 --> RESMETHRIN/CN
E220 1 RESMIN/CN
E221 1 RESMIT/CN
E222 1 RESNO TL/CN
E223 1 RESNSAND 34H/CN
E224 1 RESNSAND 34S/CN
E225 1 RESNSAND 69N/CN
E226 1 RESNSAND 87P/CN
E227 1 RESO/CN
E228 1 RESO BLUE/CN
=> s e219
             1 RESMETHRIN/CN
L15
=> d 115
L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
     10453-86-8 REGISTRY
ED
    Entered STN: 16 Nov 1984
CN
    Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-
yl)-,
      [5-(phenylmethyl)-3-furanyl]methyl ester (CA INDEX NAME)
OTHER CA INDEX NAMES:
    3-Furanmethanol, 5-benzyl-, 2,2-dimethyl-3-(2-
      methylpropenyl)cyclopropanecarboxylate (8CI)
CN
     Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-
      [5-(phenylmethyl)-3-furanyl]methyl ester (9CI)
CN
      Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-,
      (5-benzyl-3-furyl) methyl ester (8CI)
OTHER NAMES:
CN (5-Benzyl-3-furyl) methyl 2,2-dimethyl-3-(2-
      methylpropenyl)cyclopropanecarboxylate
CN
     (5-Benzyl-3-furyl) methyl chrysanthemate
CN
     (5-Benzyl-3-furyl)methyl-DL-cis, trans-chrysanthemate
CN
     5-Benzyl-3-furylmethyl (±)-cis-trans-chrysanthemate
CN
     5-Benzylfurfuryl chrysanthemate
CN
     ARI-B
CN Chrysron
CN Crossfire
CN dl-cis, trans-[(5-Benzyl-3-furyl)methyl]chrysanthemumate
CN Enforcer
CN NIA 17370
     NRDC 104
CN
CN
    Penick 1382
CN Penncapthrin
CN Pyresthrin
CN Resmethrin
CN SBP 1382
CN SBP 1383
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CN
     Seco
CN
     [5-(Phenylmethyl)-3-furanyl]methyl
     2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate
     24004-07-7
DR
MF
     C22 H26 O3
CI
     COM
     STN Files:
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
       DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
MSDS-OHS,
       PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,
       USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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# http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 124
L25
           381 L24
=> s 125 and (12-110)
          5861 L2
           981 L3
             2 L4
           768 L5
          1536 L6
          4413 L7
           747 L8
          6002 L9
           831 L10
L26
            85 L25 AND ((L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9
OR L10))
=> s 126 and pesticides/ct
         51027 PESTICIDES/CT
L27
            13 L26 AND PESTICIDES/CT
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=> s 127 and (py<2003 or ay<2003 or pry<2003)

22983870 PY<2003 4505991 AY<2003

3975343 PRY<2003

L28 2 L27 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d 128 ibib abs ti hit 1-2

L28 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:453202 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 141:23526

TITLE: Novel pyrazole-based anthranilamide

insecticides and

their preparation, compositions, and use

INVENTOR(S): Hughes, Kenneth Andrew; Lahm, George Philip;

Selby,

Thomas Paul

PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

	PATENT NO.				DATE			APPLICATION NO.					D	ATE
 WO 2004		-	A2		2004			WO 2						
20031112 < WO 2004	046129		А3		2004	0715								
W:	AE, AG,						BA,	BB,	BG,	BR,	BY,	BZ,	CA,	
CH, CN,	CO, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	
GE, GH,	GM, HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
LK, LR,	LS, LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
NZ, OM,	PG, PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
TM, TN,	mp mm	m rz					7.70	T 73.7	3777	C7 30	E2.N.f	F7.7		
	TR, TT, GH, GM,												AM,	
AZ, BY,	KG, KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
EE, ES,	FI, FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	
SK, TR,	BF, BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	
TD, TG AU 2003	295491		A1		2004	0615		AU 2	003-	2954	91			
20031112 < EP 1560	20031112 < EP 1560820					0810		EP 2	003-	7866	82			
20031112 < R:	AT, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	
MC, PT,	IE, SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK

BR 2003015714	A	20050906	BR	2003-15714	
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CN 1711255	A	20051221	CN	2003-80103401	
20031112 <					
JP 2006514632	Т	20060511	TD	2004-553598	
0000000-	1	20000311	UF	2004-333398	
20031112 <					
US 20060014808	A1	20060119	US	2005-529612	
20050330 <					
MX 2005005025	А	20050803	MX	2005-5025	
20050510 <					
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PRIORITY APPLN. INFO.:			US	2002-426693P	Ρ
20021115 <					
			WO	2003-US36167	W
20031112					
OTHER SOURCE(S):	маррат	141:23526			
• •	I.TUT/L W.T	141.43340			
GI					

AΒ The invention provides title compds. I and their N-oxides and suitable salts [wherein: Y, V = N or CR4a; W = N, CH, or CR6; R1 = H, (un) substituted alkyl, alkenyl, alkynyl or cycloalkyl, alkylcarbonyl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un) substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un) substituted heterocyclic (N/O/S) ring; G = (un) substituted 5or 6-membered non-aromatic carbo- or heterocyclic ring; R4a, R4b = H, various carbon and heteroat. substituents; R5 = alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 = (halo)alk(en/yn)yl, OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino, (un) substituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also pertains to compns. for controlling invertebrate pests, comprising a biol. effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one addnl. biol. active compound or agent. Also disclosed are methods for controlling invertebrate pests by contact of the pests or their environment with said compds. Eighteen compds. I were prepared and tested. For

instance, 3-chloro-2-hydrazinopyridine was cyclocondensed with di-Et maleate to give 55% Et 1-(3-chloro-2-pyridinyl)-3-pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthranilic acid to give a benzoxazinone, O-mesylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II. In a test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Empoasca fabae.

L28 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:465981 CAPLUS Full-text

DOCUMENT NUMBER: 137:47212

TITLE: Preparation of quinazolinones and

pyridopyrimidinones

for controlling invertebrate pests

INVENTOR(S): Annis, Gary David; Myers, Brian James; Selby,

Thomas

Paul; Stevenson, Thomas Martin; Zimmerman,

William

Thomas

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 180 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

	PAT		KIND DATE					APPLICATION NO.					DATE			
							_									
200	- WO 11203	2002	0481	15		A2 20020620				,	WO 2	001-	US46	629		
200		2002	0481	15		A3		2002	0906							
				_		_		AU,		BA,	BB,	BG,	BR,	BY,	BZ,	CA,
CH,	CN,		CO	CD	CII	C7	DE	שח	DM	D7	EC	rr.	EС	ГT	CP	CD
GE,	GH		CO,	CK,	CO,	CZ,	DE,	DK,	DM,	DZ,	EC,	cc,	ES,	гт,	GD,	GD,
01,	011,		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
LK,	LR,		I.S	т.т	Т.ГТ	T.77	МΔ	MD,	MG	MK	MN	MM	MY	M7.	NO	N7.
PH,	PL,		шо,	,	<b>10</b>	,	1111,	110,	110,	1111,	1111,	11117	1121,	114,	1107	112,
•	·		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,
UA,	UG,															
		DII	,	,	VN,	,	,		a D	0.1	0.5			F2.4	G	3 M
BE,	СН	KW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZΜ,	ΣW,	AT,
υц,	C11,		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,
SE,	TR,		,	ŕ	·	·	ŕ	ŕ	,	,	,	,	,	ŕ	·	,
			BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
TD,	TD, TG													_		
200							A 20020624				AU 2002-27243					
∠∪∪.	20011203 < EP 1341772						A2 20030910				D EP 2001-996125					
	EP	T24T	114			AZ		∠∪∪3	$O$ $\Delta$ $T$ $O$		cr Z	0.0 T-	ンプロエ.	∠ ⊃		

20011203 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004515543 T 20040527 JP 2002-549646

20011203 <--

US 20040110777 A1 20040610 US 2003-433368

20031014 <--

PRIORITY APPLN. INFO.: US 2000-254614P P

20001211 <--

WO 2001-US46629 W

20011203 <--

OTHER SOURCE(S): MARPAT 137:47212

GΙ

AΒ The title compds. [I; B = O, S; J = (un)substituted Ph, naphthyl, 5-6 membered heteroarom. ring, etc.; K, together with the two contiguous liking carbon atoms = a fused Ph, or fused pyridinyl, each optionally substituted with 1-4 R4; R3 = G, alkyl, cycloalkyl, etc.; G = (un)substituted Ph, 5-6 membered heteroarom. ring, etc.; R4 = H, alkyl, haloalkyl, etc.; n = 1-4], useful for controlling invertebrate pests, were prepared E.g. a multi-step synthesis of II which provided very good level of plant protection (20% or less feeding damage) in in test on diamondback moth (Plutella xylostella)/radish plant, was given. This invention also pertains to certain compds. I and compns. for controlling invertebrate pests comprising a biol. effective amount of a compound I and at least one addnl. component selected from the group consisting of surfactants, solid diluents and liquid diluents. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

=> s 125 and (111-115)

458 L11

1730 L12

180 L13

165 L14

820 L15

L29 81 L25 AND ((L11 OR L12 OR L13 OR L14 OR L15))

=> s 129 and pesticides/ct

51027 PESTICIDES/CT

L30 10 L29 AND PESTICIDES/CT

=> s 130 and (py<2003 or ay<2003 or pry<2003)

22983870 PY<2003 4505991 AY<2003 3975343 PRY<2003

L31 2 L30 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> s 131 not 128

L32 0 L31 NOT L28

=> s 129 and pests/ct

618 PESTS/CT

L33 1 L29 AND PESTS/CT

=> s 129 and insecticides/ct

80021 INSECTICIDES/CT

L34 72 L29 AND INSECTICIDES/CT

=> s 134 and (py<2003 or ay<2003 or pry<2003)

22983870 PY<2003 4505991 AY<2003

3975343 PRY<2003

L35 5 L34 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> s 135 not 128

L36 4 L35 NOT L28

=> d 136 ibib abs ti hit 1-4

L36 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:261833 CAPLUS Full-text

DOCUMENT NUMBER: 138:287669

TITLE: Preparation of pyrazolylcarbonyl pyridinyl

anthranilamides as arthropodicides

INVENTOR(S): Zimmerman, William Thomas

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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					_									
WO 2003	0270	99		A1		2003	0403	1	WO 2	002-	US28	274		
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LK, LR,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,

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        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY,
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EE, ES,
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BJ, CF,
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    AU 2002332864
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20020906 <--
    AU 2002332864
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                              20040721 EP 2002-799567
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PRIORITY APPLN. INFO.:
                                          US 2001-324011P
20010921 <--
                                          WO 2002-US28274
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OTHER SOURCE(S): MARPAT 138:287669
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GΙ

Title compds. [I; R1, R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, AΒ haloalkyl, haloalkenyl, haloalkynyl, halo, cyano, alkoxy, haloalkoxy, alkylthio, alkylsulfonyl, trialkylsilyl, etc.; R3 = H, alkyl, haloalkyl, halo, cyano, NO2, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkylthio, alkoxycarbonyl, etc.; R4 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R5 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halocycloalkyl, halo, cyano, CO2H, CONH2, NO2, OH, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, alkylcarbonyl, alkoxycarbonyl, trialkylsilyl, etc.], were prepared Thus, 1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H- pyrazole-5-carboxylic acid (preparation given) was stirred with (COC1)2 and cat. DMF in CH2Cl2 to give crude acid chloride, which was refluxed 3 h with 8-methyl-2H-3,1-benzoxazine-2,4(1H)dione (preparation given) and pyridine in MeCN to give 2-[1-(3chloro-2-pyridinyl)-3-trifluoromethyl-1H-pyrazol-5- yl]-8-methyl-4H-3,1-benzoxazin-4-one. The latter was refluxed 1.5 h with Me2CHNH2 to give  $1-(3-\text{chloro}-2-\text{pyridinyl})-N-[2-\text{methyl}-6-[[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl}-6)-[(1-\text{methyl-6)-[(1-\text{methyl-6)-[(1-\text{methyl-6)-[(1-\text{methyl-6)-[(1-\text{methyl-6)-[(1-\text{methyl-6)-[(1-\text{methyl-6)-[(1-\text{methyl$ methylethyl)amino]carbonyl]phenyl]-3-trifluoromethyl-1H-pyrazole-5- carboxamide. This was stirred overnight with DBU in MeCN to give N-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1methylethyl)amino]carbonyl]phenyl]-5-trifluoromethyl-1H-pyrazole-3- carboxamide. The latter at 250 ppm on radishes preinfested with Plutella xylostella gave ≤10% feeding damage.

TI Preparation of pyrazolylcarbonyl pyridinyl anthranilamides as arthropodicides

L36 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:242097 CAPLUS Full-text

DOCUMENT NUMBER: 138:267201

TITLE: Pesticidal compositions for coating plant

propagation

material containing anthranilamides

INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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20020910 <--OTHER SOURCE(S): GI

MARPAT 138:267201

R8 R6 N N R1 R7

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting. Pesticidal compositions for coating plant propagation material

anthranilamides

L36 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154155 CAPLUS Full-text

DOCUMENT NUMBER: 138:200332

TITLE: Arthropodicidal anthranilamides

INVENTOR(S): Lahm, George Philip; Selby, Thomas Paul;

Stevenson,

containing

Thomas Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
----WO 2003015519 A1 20030227 WO 2002-US25615

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GI

AB Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate pests. Arthropodicidal compns. containing anthranilamides I may further include addnl. biol.

active compds. or agents selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, Bacillus thuringiensis sp. aizawai, B. thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi.

L36 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154154 CAPLUS Full-text

DOCUMENT NUMBER: 138:200331

TITLE: Method for controlling particular insect pests

by

applying anthranilamide compounds
INVENTOR(S): Lahm, George Philip; McCann, Stephen

Frederick; Patel,

Kanu Maganbhai; Selby, Thomas Paul; Stevenson,

Thomas

Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 150 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

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20040108

OTHER SOURCE(S): MARPAT 138:200331

AΒ Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran insect pests. Insecticidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.

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    2003:242097 CAPLUS Full-text
    138:267201
DN
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   Pesticidal compositions for coating plant propagation material
containing
    anthranilamides
    Berger, Richard Alan; Flexner, John Lindsey
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    E. I. Du Pont de Nemours & Co., USA
   PCT Int. Appl., 147 pp.
    CODEN: PIXXD2
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RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
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- L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2003:154155 CAPLUS Full-text
- DN 138:200332
- TI Arthropodicidal anthranilamides
- IN Lahm, George Philip; Selby, Thomas Paul; Stevenson, Thomas Martin
- PA E. I. Du Pont de Nemours & Co., USA
- SO PCT Int. Appl., 82 pp. CODEN: PIXXD2
- DT Patent
- LA English

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     Method for controlling particular insect pests by applying
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     Lahm, George Philip; McCann, Stephen Frederick; Patel, Kanu
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     Selby, Thomas Paul; Stevenson, Thomas Martin
     E. I. Du Pont de Nemours & Co., USA
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    PCT Int. Appl., 150 pp.
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L15 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:270097 CAPLUS Full-text

DOCUMENT NUMBER: 140:282468

TITLE: Cloning and characterization of insect

ryanodine

receptors and their use for screening for

insecticidal

compounds

INVENTOR(S): Caspar, Timothy; Cordova, Daniel; Gutteridge,

Steven;

Rauh, James J.; Smith, Rejane M.; Wu, Lihong;

Tao,

Yong

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Company, USA

SOURCE: PCT Int. Appl., 731 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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## 20030923

The genes encoding ryanodine receptor homologs are provided from multiple insect families including lepidopteran tobacco budworm (Heliothis virescens), homopteran green peach aphid (Myzus persicae), corn plant hopper (Peregrinus maidis), cotton melon aphid (Aphis gossypii), and fruitfly (Drosophila melanogaster). The full-length genes were isolated, cloned, and amplified in bacterial cells. Expression in insect cells shows that the recombinant protein folds into a functional calcium release channel. The genes and their corresponding polypeptides have a number of uses including, but not limited to, the isolation of other pest ryanodine receptors, the development of screens to identify insecticidally active compds., use of fragments of genes as pesticides, fragments of protein for antibody production, fragments of protein for determination of the structure of insecticide binding sites, and identification of insecticides that disrupt the calcium balance in cells through other messengers that interact with the receptor calcium release mechanism. Methods are outlined for overcoming toxic effects of expressing recombinant proteins in host cells.

Cloning and characterization of insect ryanodine receptors and their use

for screening for insecticidal compounds 2 THERE ARE 2 CITED REFERENCES AVAILABLE REFERENCE COUNT: FOR THIS

20030923

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RE FORMAT Ρ PRAI US 2002-412795P 20020923 <--US 2002-427324P P 20021118 <--US 2003-668767 A3 20030923 WO 2003-US29834 W

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       (cloning and characterization of insect ryanodine receptors and
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                       Method for preparing fused oxazinones by
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                       Taylor, Eric Deguyon
INVENTOR(S):
PATENT ASSIGNEE(S): E.I. Du Pont de Nemours and Company, USA
                      PCT Int. Appl., 80 pp.
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• •	MARPAT	140:14615	OU
GI			

A method for preparing a fused oxazinone [I; J = an optionally]AΒ substituted carbon moiety; K together with the two contiguous liking carbon atoms = each (un)substituted a fused Ph ring or a fused 5- or 6-membered heteroarom. ring] is disclosed in which (1) a carboxylic acid of formula J-CO2H is contacted with a sulfonyl chloride of formula LS(0)2Cl [L= each (un)substituted alkyl, haloalkyl, or Ph] in the presence of an optionally substituted pyridine compound, the nominal mole ratio of sulfonyl chloride to carboxylic acid being from about 0.75 to 1.5; (2) the mixture prepared in (1) is contacted with an ortho-amino aromatic carboxylic acid in the presence of an optionally substituted pyridine compound, the nominal mole ratio of the ortho-amino aromatic carboxylic acid to carboxylic acid (II; K = same as above) charged in (1) being from about 0.8 to 1.2; and (3) addnl. sulfonyl chloride is added to the mixture prepared in (2), the nominal mole ratio of addnl. sulfonyl chloride added in (3) to carboxylic acid charged in (1) being at least about 0.5. More specifically disclosed is a method for preparing a compound of formula (III) [X = N, CR6; Y = N, CH; R1 = H, R2 = H, Me; R3 = C1-6 alkyl; R4 = C1-4 alkyl, halo; R5 = H, C1-4 alkyl, C1-4 haloalkyl, halo; R6, R7 = H, C1-4 alkyl, C1-4 haloalkyl, halo, cyano, C1-4

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

haloalkyl; R8 = H, C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, C3-6 cycloalkyl, C1-4 haloalkyl, C2-4 haloalkenyl, C2-4 haloalkynyl, C3-6 halocycloalkyl, halogen, cyano, NO2, C1-4 alkoxy, C1-4 haloalkoxy, C1-4 alkylthio, C1-4 alkylsulfinyl, C1-4 alkylsulfonyl, C1-4 alkylamino, C2-8 dialkylamino, C3-6 cycloalkylamino, (C1-4 alkyl) (C3-6 cycloalkyl) amino, etc.; R9 = CF3, OCF3, OCH52, OCH2CF3, S(O)pCF3, S(O)pCH52, halo; p = 0-2] using a compound of formula (IV; R1 -R5 = same as above; R7-R9 = same as above; X, Y = same as above) that is characterized by preparing the fused oxazinone IV by the method above, using a compound of the formula LS(O)2C1 as the sulfonyl chloride, a compound of formula (V) (R7-R9 = same as above) as the carboxylic acid, and a compound of formula (VI) (R4, R5 = same as above) as the ortho-amino aromatic carboxylic acid.

L15 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:242097 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 138:267201

TITLE: Pesticidal compositions for coating plant

propagation

material containing anthranilamides

INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE:

PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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OTHER SOURCE(S):	MARPAT	138:26720	)1	
GI	. 11. 11. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	100.20720	, <u></u>	
<u> </u>				

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting.

L15 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154155 CAPLUS Full-text

DOCUMENT NUMBER: 138:200332

TITLE: Arthropodicidal anthranilamides

INVENTOR(S): Lahm, George Philip; Selby, Thomas Paul;

Stevenson,

Thomas Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

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OTHER SOURCE(S):	MARPAT	138:200332			

AB Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate pests. Arthropodicidal compns. containing anthranilamides I may further include addnl. biol. active compds. or agents selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, Bacillus thuringiensis sp. aizawai, B. thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi.

L15 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:154154 CAPLUS Full-text

DOCUMENT NUMBER: 138:200331

TITLE: Method for controlling particular insect pests

by

applying anthranilamide compounds
Lahm, George Philip; McCann, Stephen

INVENTOR(S):
Frederick; Patel,

Kanu Maganbhai; Selby, Thomas Paul; Stevenson,

Thomas

Martin

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 150 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

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20040108 OTHER SOURCE(S): GI	MARPAT	138:200331	

AB Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran insect pests. Insecticidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.